

CLAIMS

1. A blade for creping a paper web from a surface, said blade comprising a steel substrate and a ceramic top layer, said top layer forming a working edge adapted for contact with said surface and a web impact area upon which the web impacts during creping, wherein the ceramic composition of said ceramic top layer has a content of chromia (Cr_2O_3).
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2. A blade according to claim 1, wherein the ceramic top layer is a single phase ceramic material.
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3. A blade according to claim 1, wherein the ceramic composition contains at least 75% by weight chromia.
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4. A blade according to claim 1, wherein the thickness of the ceramic top layer at the edge section of the blade is in the range from 150 to 300 μm .
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5. A blade according to claim 4, wherein the thickness of the ceramic top layer at the edge section of the blade is in the range from 200 to 300 μm .
- 25 6. A blade according to claim 1, further comprising a bond coat between the steel substrate and the ceramic top layer.
7. A blade according to claim 6, wherein said bond coat comprises Ni-Cr.
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8. A blade according to claim 6, wherein said bond coat has a thickness between 10 and 50 μm .
- 35 9. A blade according to claim 1, wherein the steel substrate has a prebevel with an angle of up to 10 degrees, upon which the ceramic top layer is deposited.

10. A blade according to claim 9, wherein said prebevel has an angle of 4-8 degrees.

5 11. A blade according to claim 1, wherein said top layer is a thermally sprayed ceramic layer.

12. A blade according to claim 1, wherein the steel substrate has a thickness in the range from 0.635 to
10 1.250 mm.

13. A blade according to claim 1, wherein the steel substrate has a width in the range from 50 to 150 mm.

15 14. A blade according to claim 13, wherein the steel substrate has a width in the range from 75 to 120 mm.

15. A blade for creping a paper web from a surface, said blade comprising a steel substrate which is covered by a
20 ceramic top layer that forms a working edge adapted for contact with said surface and a web impact area upon which the web impacts during creping, wherein the ceramic composition of said ceramic top layer comprises chromia-titania ($\text{Cr}_2\text{O}_3/\text{TiO}_2$) with a titania (TiO_2) content of up
25 to 25% by weight.

16. A blade according to claim 15, wherein the ceramic top layer is a single phase ceramic material.

30 17. A blade according to claim 15, wherein the ceramic top layer has a titania content in the range from 5% to 15% by weight.

18. A blade according to claim 17, wherein the ceramic
35 top layer has a titania content in the range from 10% to 15%.

19. A blade according to claim 15, wherein said top layer is a thermally sprayed ceramic layer.

20. A blade according to claim 15, wherein the thickness
5 of the ceramic top layer at the edge section of the blade is in the range from 150 to 300 μm .

21. A blade according to claim 20, wherein the thickness
10 of the ceramic top layer at the edge section of the blade is in the range from 200 to 300 μm .

22. A blade according to claim 15, further comprising a bond coat between the steel substrate and the ceramic top layer.
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23. A blade according to claim 22, wherein said bond coat comprises Ni-Cr.

24. A blade according to claim 22, wherein said bond
20 coat has a thickness between 10 and 50 μm .

25. A blade according to claim 15, wherein the steel substrate has a prebevel with an angle of up to 10 degrees, upon which the ceramic top layer is deposited.
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26. A blade according to claim 25, wherein said prebevel has an angle of 4-8 degrees.

27. A blade according to claim 15, wherein the steel
30 substrate has a thickness in the range from 0.635 to 1.250 mm.

28. A blade according to claim 15, wherein the steel substrate has a width in the range from 50 to 150 mm.
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29. A blade according to claim 28, wherein the steel substrate has a width in the range from 75 to 120 mm.